

A “foreign railroad” refers to a railroad that is incorporated in a place outside the U.S. and is operated out of a foreign country but operates for some distance in the U.S.

#### § 227.5 Definitions.

As used in this part—

*Action level* means an eight-hour time-weighted-average sound level (TWA) of 85 dB(A), or, equivalently, a dose of 50 percent, integrating all sound levels from 80 dB(A) to 140 dB(A).

*Administrator* means the Administrator of the Federal Railroad Administration or the Administrator’s delegate.

*Artifact* means any signal received or recorded by a noise measuring instrument that is not related to occupational noise exposure and may adversely impact the accuracy of the occupational noise measurement.

*Audiogram* means a record of audiometric testing, showing the thresholds of hearing sensitivity measured at discrete frequencies, as well as other recordkeeping information.

*Audiologist* means a professional, who provides comprehensive diagnostic and treatment/rehabilitative services for auditory, vestibular, and related impairments and who

(1) Has a Master’s degree or doctoral degree in audiology and

(2) Is licensed as an audiologist by a State; or in the case of an individual who furnishes services in a State which does not license audiologists, has successfully completed 350 clock hours of supervised clinical practicum (or is in the process of accumulating such supervised clinical experience), performed not less than 9 months of supervised full-time audiology services after obtaining a master’s or doctoral degree in audiology or a related field, and successfully completed a national examination in audiology approved by the Secretary of the U.S. Department of Health and Human Services.

*Audiometry* means the act or process of measuring hearing sensitivity at discrete frequencies. Audiometry can also be referred to as audiometric testing.

*Baseline audiogram* means an audiogram, recorded in accordance with § 227.109, against which subsequent

audiograms are compared to determine the extent of change of hearing level.

*Class I, Class II, and Class III railroads* have the meaning assigned by the regulations of the Surface Transportation Board (49 CFR part 120; General Instructions 1-1).

*Continuous noise* means variations in sound level that involve maxima at intervals of 1 second or less.

*Decibel (dB)* means a unit of measurement of sound pressure levels.

*dB(A)* means the sound pressure level in decibels measured on the A-weighted scale.

*Employee* means any individual who is engaged or compensated by a railroad or by a contractor to a railroad to perform any of the duties defined in this part.

*Exchange rate* means the change in sound level, in decibels, which would require halving or doubling of the allowable exposure time to maintain the same noise dose. For purposes of this part, the exchange rate is 5 decibels.

*FRA* means the Federal Railroad Administration.

*Hearing protector* means any device or material, which is capable of being worn on the head, covering the ear canal or inserted in the ear canal; is designed wholly or in part to reduce the level of sound entering the ear; and has a scientifically accepted indicator of its noise reduction value.

*Hertz (Hz)* means a unit of measurement of frequency numerically equal to cycles per second.

*Medical pathology* means a condition or disease affecting the ear which is medically or surgically treatable.

*Noise operational controls* means a method used to reduce noise exposure, other than hearing protectors or equipment modifications, by reducing the time a person is exposed to excessive noise.

*Occasional service* means service of not more than a total of 20 days in a calendar year.

*Otolaryngologist* means a physician specializing in diagnosis and treatment of disorders of the ear, nose, and throat.

*Periodic audiogram* is a record of follow-up audiometric testing conducted at regular intervals after the baseline audiometric test.

*Person* means an entity of any type covered under 1 U.S.C. 1, including but not limited to the following: a railroad; a manager, supervisor, official, or other employee or agent of a railroad; an owner, manufacturer, lessor, or lessee of railroad equipment, track, or facilities; an independent contractor providing goods or services to a railroad; and any employee of such owner, manufacturer, lessor, lessee, or independent contractor.

*Professional Supervisor of the Audiometric Monitoring Program* in a hearing conservation program means an audiologist, otolaryngologist, or a physician with experience and expertise in hearing and hearing loss.

*Qualified Technician* is a person who is certified by the Council for Accreditation in Occupational Hearing Conservation or equivalent organization; or who has satisfactorily demonstrated competence in administering audiometric examinations, obtaining valid audiograms, and properly using, maintaining, and checking calibration and proper functioning of the audiometers used; and is responsible to the Professional Supervisor of the Audiometric Testing Program.

*Railroad* means any form of non-highway ground transportation that runs on rails or electromagnetic guide-ways and any entity providing such transportation, including:

(1) Commuter or other short-haul railroad passenger service in a metropolitan or suburban area and commuter railroad service that was operated by the Consolidated Rail Corporation on January 1, 1979; and

(2) High speed ground transportation systems that connect metropolitan areas, without regard to whether those systems use new technologies not associated with traditional railroads. The term “railroad” is also intended to mean a person that provides transportation by railroad, whether directly or by contracting out operation of the railroad to another person. The term does not include rapid transit operations in an urban area that are not connected to the general railroad system of transportation.

*Representative personal sampling* means measurement of an employee's noise exposure that is representative of

the exposures of other employees who operate similar equipment under similar conditions.

*Sound level or Sound pressure level* means ten times the common logarithm of the ratio of the square of the measured A-weighted sound pressure to the square of the standard reference pressure of twenty micropascals, measured in decibels. For purposes of this regulation, SLOW time response, in accordance with ANSI S1.43–1997 (Reaffirmed 2002), “Specifications for Integrating-Averaging Sound Level Meters,” is required. The Director of the Federal Register approves this incorporation by reference of this standard in this section in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a copy of the incorporated standard from the American National Standards Institute at 1819 L Street, NW., Washington, DC 20036 or <http://www.ansi.org>. You may inspect a copy of the incorporated standard at the Federal Railroad Administration, Docket Room, 1200 New Jersey Avenue, SE., Washington, DC 20590, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

*Standard threshold shift (STS)* means a change in hearing sensitivity for the worse, relative to the baseline audiogram, or relative to the most recent revised baseline (where one has been established), of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear.

*Time-weighted-average eight-hour (or 8-hour TWA)* means the sound level, which, if constant over 8 hours, would result in the same noise dose as is measured. For purposes of this part, the exchange rate is 5 decibels.

*Tourist, scenic, historic, or excursion operations* means railroad operations that carry passengers, often using antiquated equipment, with the conveyance of the passengers to a particular destination not being the principal purpose.

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